

MPLHOXD0 | MPLHEXD0 – DRUVA®PUR MANIFOLD

MANIFOLD | PURE LINE (BRASS CHROME PLATED) | 20 m³ SERIES | HIGH PRESSURE RANGE | DUAL STAGE



This manifold is used in gas supply systems for pure, inert, flammable, oxidising gases and gas mixtures.
It is not usable for corrosive and / or toxic gases and their mixtures.



Type **MPLHOXD000**
00 Without HP Valve
& LP Valve
0 Without Specials

TECHNICAL SPECIFICATION:

- > Manifold for one gas cylinder or bundle
- > Regulator and Valves – Hastelloy/Elgiloy diaphragm tightening system to atmosphere
- > Compact design
- > Excellent pressure adjustment
- > Valves - designed and approved in accordance with relevant sections of DIN 10297:2015
- > Regulator - designed and approved regarding ISO 7291
- > Relief valve in delivery pressure side
- > Available with shut-off valve at outlet, safety valve at outlet check valve at inlet
- > Electrostatic chargeability test
 - Fulfills requirements according to DIN 80079-36, IEC TS 60079-32-1 and German TRGS 727
 - Usable in EX- areas zones 1 and 2 for gases with explosion risk group I, IIA, IIB, IIC

SPECIAL FEATURES OF MANIFOLD:

- > Splitted plates of manifold
 - Separated mounting of ground plate
 - Easy mounting of manifold to ground plate and fix with one screw only
- > Front plate cutout for in-field gauge replacement

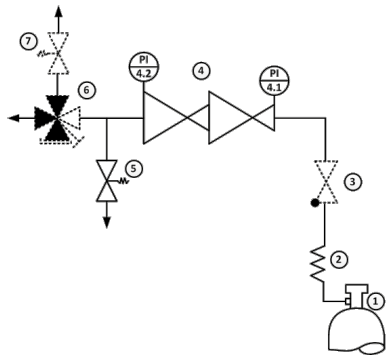


Type **MPLHOXD00U**
00 Without HP Valve
& LP Valve
U Specials
Check Valve &
Safety Valve



Type **MPLHOXD0SU**
0S LP Shut-off Valve
U Specials
Check Valve &
Safety Valve

| TECHNICAL DATA – MANIFOLD | |
|-----------------------------------------------------|-----------------------------------------------------------------------------------|
| Working temperature: | -20 °C to +60 °C |
| Inlet/ outlet ports: | see technical drawing |
| Leakage rate seat: | <5x10 ⁻⁶ mbar l/s (Helium) |
| Leakage rate outside: | <1x10 ⁻⁹ mbar l/s (Helium) |
| Weight: | max 5,79 kg |
| Flow nominal: | 20 m³/h (N₂) acc. to ISO 7291 at 20 bar outlet pressure and 41 bar inlet pressure |
| Pressure rates manifold: | |
| Max. inlet pressure: | 300 bar |
| Delivery pressure: | 1/ 3/ 6/ 10/ 14 bar |
| TECHNICAL DATA – REGULATOR | |
| Filter: | 1x for inlet 1x for each outlet |
| Material gas wetted parts: | |
| Regulator body: | Brass chrome plated |
| Regulator diaphragm: | Hastelloy |
| Regulator seat: | PCTFE (1 st stage) PTFE (2 nd stage) |
| Relief valve seat: | |
| MPLHOXD0 Version | FKM |
| MPLHEXD0 Version | EPDM |
| Regulator poppet: | Brass |
| Pressure gauges rates (pressure rates): | 1,5 (1)/ 5 (3)/ 10 (6)/ 18 (10)/ 25 (14) bar |
| Contact gauges available – please contact us | |
| Cracking pressure relief valves: | 1,5 (1)/ 4,6 (3)/ 9,2 (6)/ 15,4 (10)/ 21,6 (14) bar |
| Test in production: | Pressure test with Helium of each item |
| | Seat leakage test with Helium of each item |
| | Helium leak test of each regulator against atmosphere |
| | Test of functionality of each item |



- 1 – Gas cylinder
 2 – Coil/hose
 3 – Check valve
 4 – Pressure regulator
 5 – Relief valve
 6 – Shut-off valve (1xin, 3xout)
 7 – Safety valve

Options & specials are shown as dotted line

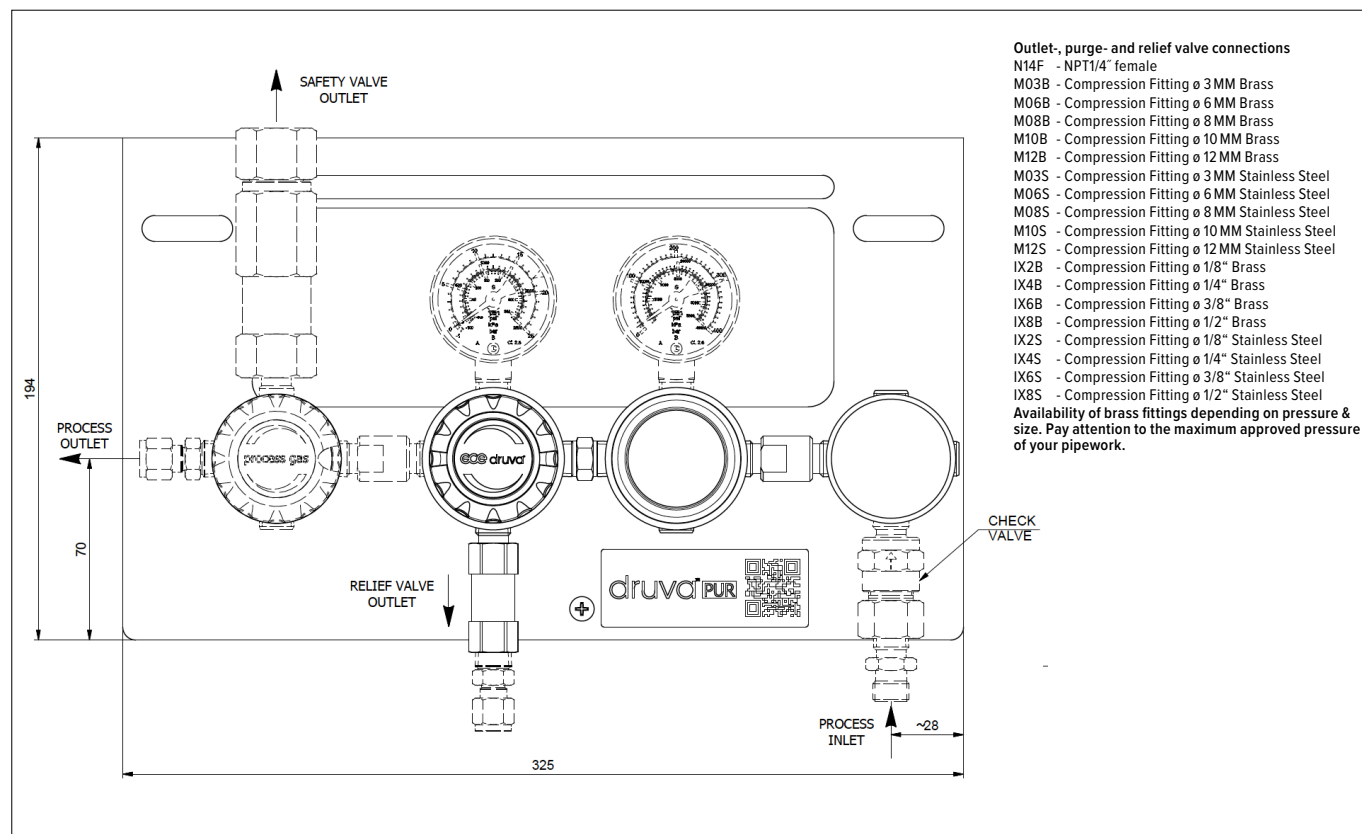
| | |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Type test in accordance with DIN 7291 |
| | Additional life cycle test |
| Approvals during development: | Electrostatic chargeability test |
| | <ul style="list-style-type: none"> Fulfill requirements according DIN 80079-36, IEC TS 60079-32-1 and German TRGS 727 Usable in EX-areas zones 1 and 2 for gases with explosion risk group I, IIA, IIB, IIC |

| TECHNICAL DATA – VALVES | |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max. working pressure: | 300 bar |
| Kv-value: | 0,25 |
| Seat diameter: | 5 mm |
| Leakage rate seat: | <5x10 ⁻⁶ mbar l/s (Helium) |
| Leakage rate outside: | <1x10 ⁻⁹ mbar l/s (Helium) |
| Filter: | 1x for each inlet 1x for each outlet |
| Material gas wetted parts: | |
| Valve body: | Brass chrome plated |
| Valve diaphragm: | 4-Port: 1x Hastelloy, 1x Elgiloy 2-Port: 2x Elgiloy |
| Valve seat: | PCTFE |
| Valve poppet: | Brass |
| Test in production: | Pressure test with Helium of each item |
| | Seat leakage test with Helium of each item |
| | Helium leak test of each valve against atmosphere |
| | Test of functionality of each item |
| Approvals during development: | Type test in accordance with relevant sections of DIN 10297:2015 |
| | Electrostatic chargeability test |
| | <ul style="list-style-type: none"> Fulfill requirements according DIN 80079-36, IEC TS 60079-32-1 and German TRGS 727 Usable in EX-areas zones 1 and 2 for gases with explosion risk group I, IIA, IIB, IIC |
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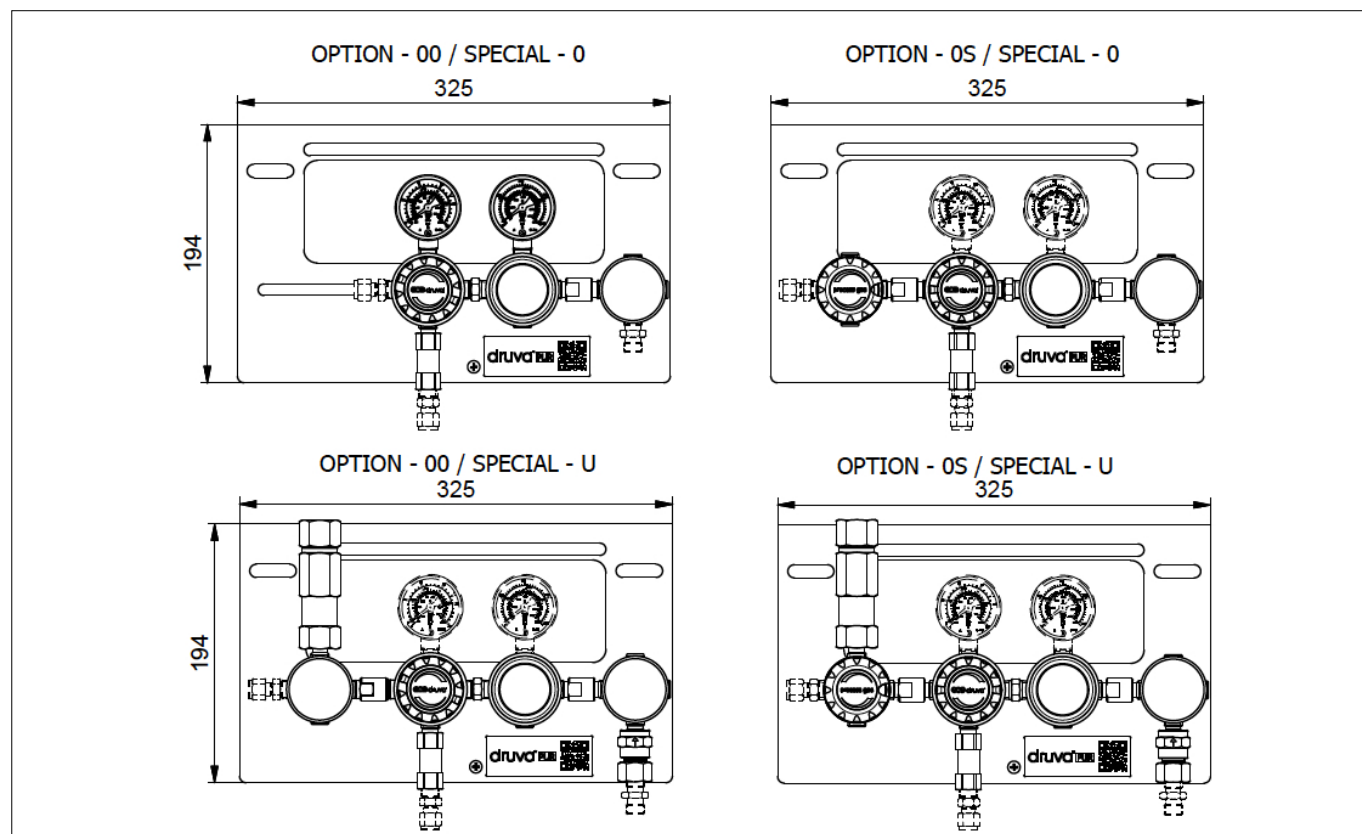
| TECHNICAL DATA – PLATES | |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ground plate: | Stainless Steel (polished) Option to secure arrestor cable of hoses with hook on ground plate. Grounding bolt Cut outs on top and bottom allows installation |
| Dimensions ground plate: (Height x Width x Length) | 194 x 30 x 250 mm |
| Front plate: | Stainless Steel (polished) Cut outs for easy replacement of gauges Free space for additional installer label (e.g. remark for next maintenance) |
| Dimensions front plate: (Height x Width x Length) | 194 x 30 x 325 mm |
| Marking on panel: | Product range label QR-Code – link to online product configurator |

| TECHNICAL DATA – SAFETY VALVES (S) | |
|------------------------------------|--------------------------------------------------------------------------------|
| | Spring loaded according P.E.D. 2014/68/EU and AD2000 (A2) |
| Opening pressure: | 1,5/ 4,5/ 9/ 15/ 21 bar |
| Leakage rate: | < 5 x 10 ⁻⁶ mbar l/s (valve seat) at nominal pressure of receiver |
| Material: | Housing and metal parts made of brass, pressure spring made of stainless steel |
| Seat and seal: | FKM |
| Outlet connection: | NPT ½" female |

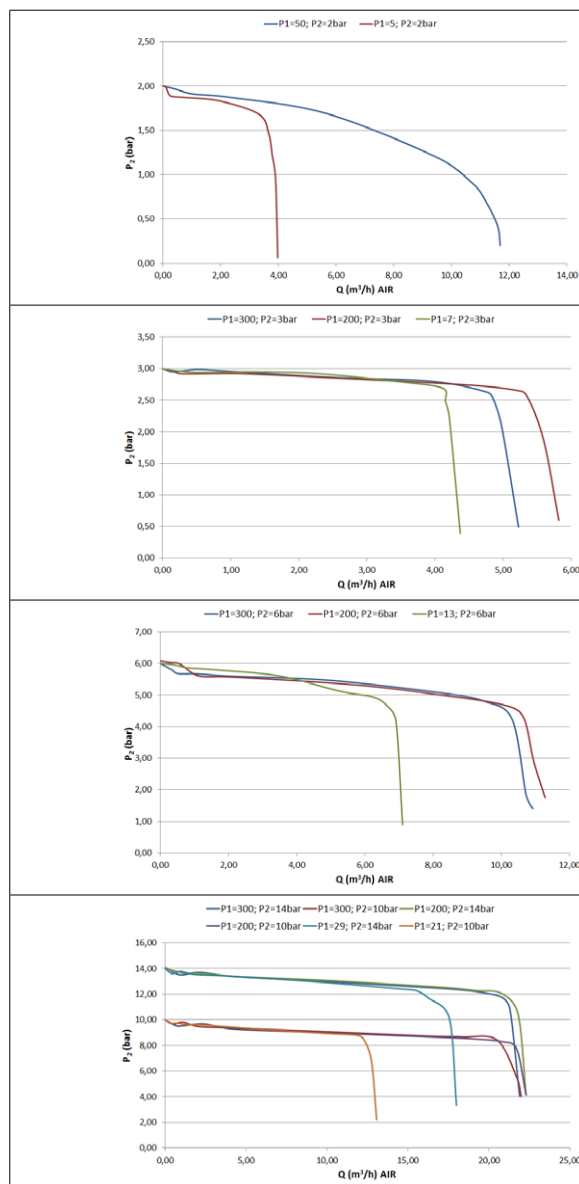
TECHNICAL DRAWING:



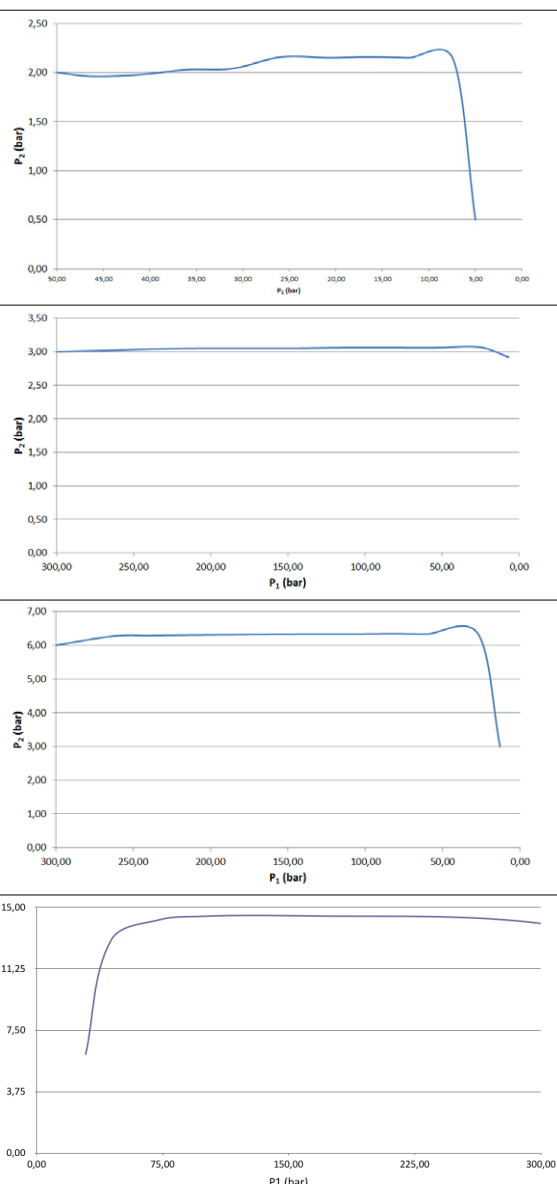
TECHNICAL DRAWING – VARIANTS:



FLOW CURVES:



DYNAMIC EXPANSION CURVES:



ORDER CODE:

Example Manifold | PUR Linie | Brass Chrome Plated | Low Flow | High Pressure Range | Dual Stage

| MPLH0X | D | 00 | C | FX | CX | BT | BT | N14F | N14F (1/4" NPT female) | N14F (1/4" NPT female) |
|--------|--------------|------------------------|------------------------------|-------------------------|--------------------------|------------------------------|------------------------------|--------------------------|-----------------------------------------------|-----------------------------------------------|
| MPLHEX | | | | | | | | | | |
| | Stages | Options | Specials | Inlet pressure (bar) | Outlet pressure (bar) | Inlet pressure gauge | Outlet pressure gauge | Process inlet connection | Process outlet connection | Purge & relief connection |
| | D Dual stage | 00 without any options | 0 without | F4 60 | AX 2 | BT Bourdon Tube gauge | BT Bourdon Tube gauge | N14F 1/4" NPT female | possible connections see technical drawing | possible connections see technical drawing |
| | | 0S LP Shut-off valve | C Check valve | FX 200 | BX 3 | I1 Inductiv contact gauge I1 | I2 Inductiv contact gauge I2 | M14M Metric 14x1.5 male | | |
| | | | S Safety valve | GX 300 | CX 6 | R5 Reed contact gauge R5 | R2 Reed contact gauge R2 | | | |
| | | | U Check valve + safety valve | | D2 10 | | I1 Inductiv contact gauge I1 | | | |
| | | | | | DX 14 | | | | | |

Order code (as described above) without special characters or spaces! Complete Order Code **MPLH0XD00CFXCXBTBTN14FN14FN14F**

Link to online product configurator